Form C-122-A
Revised April 20, 1955

Initial Deliverability Test

NEW MEXICO OIL CONSERVATION COMMISSION

GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA EXCEPT BARKER DOME STORAGE AREA)

Pool Blanco Formation Mesa Verde County Rio Arriba

Purchasing Pipeline El Paso Natural Gas Co. Date Test Filed 5-27-60

Operator Humble Oil & Refining Co Lease North Lindreth Gas Unit Well No. 2

Unit M Sec. 20 Twp. 26N Rge. 2W Pay Zone: From 5486 To 6086

Casing: OD 4½ WT. 11.6 Set At 6190 Tubing: OD 2 3/8 WT. 4.7 T. Perf. 5422

Produced Through: Casing ____ Tubing X Gas Gravity: Measured 0.675 Estimated ____

Date of Flow Test: From 2-7-60 To 2-15-60 * Date S.I.P. Measured 2-9-58

Meter Run Size 4" Orifice Size ____ Type Chart S.E. Type Taps Flange

OBSERVED DATA

Flowing casing pressure (Dwt)	____ psig + 12 =	____	psia	(a)
Flowing tubing pressure (Dwt)	____ psig + 12 =	____	psia	(b)
Flowing meter pressure (Dwt)	____ psig + 12 =	____	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:				
Normal chart reading	____ psig + 12 =	____	psia	(d)
Square root chart reading (____)^2 x spring constant	____ =	____	psia	(d)
Meter error (c) - (d) or (d) - (c)	± =	____	psi	(e)
Friction loss, Flowing column to meter:				
(b) - (c) Flow through tubing: (a) - (c) Flow through casing	=	____	psi	(f)
Seven day average static meter pressure (from meter chart):				
Normal chart average reading	____ psig + 12 =	575	psia	(g)
Square root chart average reading (____)^2 x sp. const.	=	____	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)	=	575	psia	(h)
P_t = (h) + (f)	=	____	psia	(i)
Wellhead casing shut-in pressure (Dwt)	____ psig + 12 =	____	psia	(j)
Wellhead tubing shut-in pressure (Dwt)	1665 psig + 12 =	1677	psia	(k)
P_c = (j) or (k) whichever well flowed through	=	1677	psia	(l)
Flowing Temp. (Meter Run)	68 °F + 460 =	528	°Abs	(m)
P_d = ½ P_c = ½ (l)	=	838	psia	(n)

FLOW RATE CALCULATION

$$Q = 179 \text{ (integrated)} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = \frac{\quad}{\quad} = \quad \right)^{*} = 179 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q \left[\frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} = \frac{2110}{2481} \right]^{n} = 179 \left[\frac{2110}{2481} \right]^{0.850} = 158 \text{ MCF/da.}$$

$$0.885$$

SUMMARY

P_c =	1677	psia	
Q =	179	Mcf/day	
P_w =	575	psia	
P_d =	838	psia	
D =	158	Mcf/day	

Company Humble Oil & Refining Co.

By D. A. Duggan

Title Consulting Engineer

Witnessed by ____

Company ____

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)2$	$\frac{(FcQ)^2}{R^2}$ $(1-e^{-s})$	P_t^2 (Column i)	$P_t^2 + R^2$	P_w
		Negligible				

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